General

Name *Tychem® BR Coverall*

ID# 125

Technology	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Stock Number	95120
Protection Type	Percutaneous
Equipment Category	Coverall; zipper front
Availability	Commercially available
Current User(s)	U.S. government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request..
Manufacturer	DuPont Tyvek® Protective Apparel U.S. Highway #1 North McBee, SC 29101 800–845–6962 (Tel) 843–335–8599 (Fax) e-mail: tyvekinf@usa.dupont.com
Manufacturer Type	Domestic manufacturer
Developer	DuPont Protective Apparel
Source	DuPont Tyvek® Protective Apparel e-mail: Mary-Ann.Daniel@usa.dupont.com POC: M. A. Daniel 888–577–6960 (Tel)
Certification	Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against	Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request Document 595.
Biological Warfare (BW) Agents Protected Against	Not specified

Toxic Industrial (TIMs) Protected Against	A broad range of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 648, or go to www.dupont.com/tyvek/protective-apparel .
Duration of Protection	Fabric test data: Average breakthrough time GA, GB, GD, HD, L, and VX: Geater than 12 h at 10 g/m^2 GB, HD, and VX: Greater than 12 h at 100 g/m^2 (total coverage) L: Greater than 2 h at 100 g/m^2 (total coverage). For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 636, or go to www.dupont.com/tyvek/protective-apparel .
Recommended Use(s)	Emergency response, crisis management, remediation, secondary decon in hospital or emergency area, and warm zone decon

Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	4 lb/ctn and 2 units/ctn
Package Size and Volume	16 in L x 10 1/4 in W x 14 1/8 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Thermo Bond seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress.
Color	Yellow or olive drab

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility
Consumables	None
Maintenance Requirements	Visual inspection prior to use
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating “for training use only” after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user. Compatible with all commercial cooling systems.
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	$83/carton
Maintenance Cost	Minimum labor cost for routine suit inspection
Warranty	90 d for workmanship and materials

Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal.
Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.
Launderability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, eye/face, hand, and head protection
Testing Information	Physical properties: Basis weight (ASTM D3776–85) 6.6 oz/yd^2 Thickness (ASTM D1777–64) 16 mils Ball burst (ASTM D3787–89) 90 psi Breaking strength—Grab (md/xd) (ASTM D5034) 90/84 lbs. Tearing strength—Trapezoid (md/xd) (ASTM D5597) 19/19 lbs. Permeation data available by calling 1–877–797–5907 or go to www.dupont.com/tyvek/protective-apparel
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Not applicable
EOD Compatibility	Compatible with EOD suit

General

Name *Tychem® BR Coverall*

ID# 126

Technology Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number 95122

Protection Type Percutaneous

Equipment Category Coverall; zipper front, hood, boot, and elastic wrist

Availability Commercially available

Current User(s) U.S. government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer
DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800–845–6962 (Tel)
843–335–8599 (Fax)
e-mail: tyvekinf@usa.dupont.com

Manufacturer Type Domestic manufacturer

Developer DuPont Protective Apparel

Source
DuPont Tyvek® Protective Apparel
e-mail: Mary-Ann.Daniel@usa.dupont.com
POC: M. A. Daniel
888–577–6960 (Tel)

Certification Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request Document 595.

Biological Warfare (BW) Agents Protected Against Not specified

Toxic Industrial (TIMs) Protected Against A broad range of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 648, or go to www.dupont.com/tyvek/protective-apparel .

Duration of Protection	Fabric test data: Average breakthrough time GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m^2 GB, HD, and VX: Greater than 12 h at 100 g/m^2 (total coverage) L: Greater than 2 h at 100 g/m^2 (total coverage) Fabric test data: Average breakthrough time GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m^2 GB, HD,and VX: Greater than 12 h at 100 g/m^2 (total coverage) L: Greater than 2 h at 100 g/m^2 (total coverage). For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 636, or go to www.dupont.com/tyvek/protective-apparel .
Recommended Use(s)	Emergency response, crisis management, remediation, secondary decon in hospital or emergency area, and warm zone decon

Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	4 lb/ctn and 2 units/ctn
Package Size and Volume	16 in L x 10 1/4 in W x 14 1/8 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Thermo Bond seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress.
Color	Yellow or olive drab

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility
Consumables	None
Maintenance Requirements	Visual inspection prior to use
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating “for training use only” after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user. Compatible with all commercial cooling systems.
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	$113/carton
Maintenance Cost	Minimum labor cost for routine suit inspection
Warranty	90 d for workmanship and materials

Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal.
Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.
Launderability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, eye/face, hand, and head protection
Testing Information	Physical properties: Basis weight (ASTM D3776–85) 6.6 oz/yd^2 Thickness (ASTM D1777–64) 16 mils Ball burst (ASTM D3787–89) 90 psi Breaking strength—Grab (md/xd) (ASTM D5034) 90/84 lbs. Tearing strength—Trapezoid (md/xd) (ASTM D5597) 19/19 lbs. Permeation data available by calling 1–877–797–5907 or go to www.dupont.com/tyvek/protective-apparel
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Not applicable
EOD Compatibility	Compatible with EOD suit

General

Name *Tychem® BR Coverall*

ID# 127

Technology Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number 95124

Protection Type Percutaneous

Equipment Category Coverall; zipper front, respirator hood, boots, and elastic wrists

Availability Commercially available

Current User(s) U.S. government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer
DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800–845–6962 (Tel)
843–335–8599 (Fax)
e-mail: tyvekinf@usa.dupont.com

Manufacturer Type Domestic manufacturer

Developer DuPont Protective Apparel

Source
DuPont Tyvek® Protective Apparel
e-mail: Mary-Ann.Daniel@usa.dupont.com
POC: M. A. Daniel
888–577–6960 (Tel)

Certification Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request Document 595.

Biological Warfare (BW) Agents Protected Against Not specified

Toxic Industrial (TIMs) Protected Against A broad range of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 648, or go to www.dupont.com/tyvek/protective-apparel .

Duration of Protection	Fabric test data: Average breakthrough time GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m^2 GB, HD, and VX: Greater than 12 h at 100 g/m^2 (total coverage) L: Greater than 2 h at 100 g/m^2 (total coverage). For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 636, or go to www.dupont.com/tyvek/protective-apparel .
Recommended Use(s)	Emergency response, crisis management, remediation, secondary decon in hospital or emergency area, and warm zone decon

Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	4 lb/ctn and 2 units/ctn
Package Size and Volume	16 in L x 10 1/4 in W x 14 1/8 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Thermo Bond seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress.
Color	Yellow or olive drab

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility
Consumables	None
Maintenance Requirements	Visual inspection prior to use
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating “for training use only” after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user. Compatible with all commercial cooling systems.
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	$119/carton
Maintenance Cost	Minimum labor cost for routine suit inspection
Warranty	90 d for workmanship and materials
Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal.

Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.
Launderability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, eye/face, hand, and head protection
Testing Information	Physical properties: Basis weight (ASTM D3776–85) 6.6 oz/yd^2 Thickness (ASTM D1777–64) 16 mils Ball burst (ASTM D3787–89) 90 psi Breaking strength—Grab (md/xd) (ASTM D5034) 90/84 lbs. Tearing strength—Trapezoid (md/xd) (ASTM D5597) 19/19 lbs. Permeation data available by calling 1–877–797–5907 or go to www.dupont.com/tyvek/protective-apparel
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Not applicable
EOD Compatibility	Compatible with EOD suit

WORKING DRAFT

General

Name ***Tychem® BR Coverall***

ID# 128

Technology Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number 95125

Protection Type Percutaneous

Equipment Category Coverall; zipper front, elastic wrists, and ankles

Availability Commercially available

Current User(s) U.S. government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer
DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800–845–6962 (Tel)
843–335–8599 (Fax)
e-mail: tyvekinf@usa.dupont.com

Manufacturer Type Domestic manufacturer

Developer DuPont Protective Apparel

Source
DuPont Tyvek® Protective Apparel
e-mail: Mary-Ann.Daniel@usa.dupont.com
POC: M. A. Daniel
888–577–6960 (Tel)

Certification Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request Document 595.

Biological Warfare (BW) Agents Protected Against Not specified

Toxic Industrial (TIMs) Protected Against A broad range of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 648, or go to www.dupont.com/tyvek/protective-apparel .

Duration of Protection	Fabric test data: Average breakthrough time GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m^2 GB, HD, and VX: Greater than 12 h at 100 g/m^2 (total coverage) L: Greater than 2 h at 100 g/m^2 (total coverage). For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 636, or go to www.dupont.com/tyvek/protective-apparel .
Recommended Use(s)	Emergency response, crisis management, remediation, secondary decon in hospital or emergency area, and warm zone decon

Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	4 lb/ctn and 2 units/ctn
Package Size and Volume	16 in L x 10 1/4 in W x 14 1/8 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Thermo Bond seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress.
Color	Yellow or olive drab

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility
Consumables	None
Maintenance Requirements	Visual inspection prior to use
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating “for training use only” after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user. Compatible with all commercial cooling systems.
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	$92/carton
Maintenance Cost	Minimum labor cost for routine suit inspection
Warranty	90 d for workmanship and materials
Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal..

Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.
Launderability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, eye/face, hand, and head protection
Testing Information	Physical properties: Basis weight (ASTM D3776–85) 6.6 oz/yd^2 Thickness (ASTM D1777–64) 16 mils Ball burst (ASTM D3787–89) 90 psi Breaking strength—Grab (md/xd) (ASTM D5034) 90/84 lb Tearing strength—Trapezoid (md/xd) (ASTM D5597) 19/19 lb Permeation data available by calling 1–877–797–5907 or go to www.dupont.com/tyvek/protective-apparel
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Not applicable
EOD Compatibility	Compatible with EOD suit

General

Name *Tychem® BR Coverall*

ID# 129

Technology	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Stock Number	95127
Protection Type	Percutaneous
Equipment Category	Coverall; zipper front, hood, elastic wrists, and ankles
Availability	Commercially available
Current User(s)	U.S. government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.
Manufacturer	DuPont Tyvek® Protective Apparel U.S. Highway #1 North McBee, SC 29101 800–845–6962 (Tel) 843–335–8599 (Fax) e-mail: tyvekinf@usa.dupont.com
Manufacturer Type	Domestic manufacturer
Developer	DuPont Protective Apparel
Source	DuPont Tyvek® Protective Apparel e-mail: Mary-Ann.Daniel@usa.dupont.com POC: M. A. Daniel 888–577–6960 (Tel)
Certification	Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against	Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request Document 595.
Biological Warfare (BW) Agents Protected Against	Not specified

Toxic Industrial (TIMs) Protected Against	A broad range of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 648, or go to www.dupont.com/tyvek/protective-apparel .
Duration of Protection	Fabric test data: Average breakthrough time GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m^2 GB, HD, and VX: Greater than 12 h at 100 g/m^2 (total coverage) L: Greater than 2 h at 100 g/m^2 (total coverage). For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 636, or go to www.dupont.com/tyvek/protective-apparel .
Recommended Use(s)	Emergency response, crisis management, remediation, secondary decon in hospital or emergency area, and warm zone decon

Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	4 lb/ctn and 2 units/ctn
Package Size and Volume	16 in L x 10 1/4 in W x 14 1/8 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Thermo Bond seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress.
Color	Yellow or olive drab

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility
Consumables	None
Maintenance Requirements	Visual inspection prior to use
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating “for training use only” after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user. Compatible with all commercial cooling systems.
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	$95/carton
Maintenance Cost	Minimum labor cost for routine suit inspection

Warranty	90 d for workmanship and materials
Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal.
Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.
Launderability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, eye/face, hand, and head protection
Testing Information	Physical properties: Basis weight (ASTM D3776–85) 6.6 oz/yd^2 Thickness (ASTM D1777–64) 16 mils Ball burst (ASTM D3787–89) 90 psi Breaking strength—Grab (md/xd) (ASTM D5034) 90/84 lbs. Tearing strength—Trapezoid (md/xd) (ASTM D5597) 19/19 lbs. Permeation data available by calling 1–877–797–5907 or go to www.dupont.com/tyvek/protective-apparel
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Not applicable
EOD Compatibility	Compatible with EOD suit

General

Name ***Tychem® BR Coverall***

ID# 130

Picture Not Available

Technology	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Stock Number	95187
Protection Type	Percutaneous
Equipment Category	Coverall; zipper front, hood, expanded back, sock boots with flaps, and elastic wrists
Availability	Commercially available
Current User(s)	U.S. government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.
Manufacturer	DuPont Tyvek® Protective Apparel U.S. Highway #1 North McBee, SC 29101 800–845–6962 (Tel) 843–335–8599 (Fax) e-mail: tyvekinf@usa.dupont.com
Manufacturer Type	Domestic manufacturer
Developer	DuPont Protective Apparel
Source	DuPont Tyvek® Protective Apparel e-mail: Mary-Ann.Daniel@usa.dupont.com POC: M. A. Daniel 888–577–6960 (Tel)
Certification	Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against	Nerve agents (GA, GB, GD and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request Document 595.
Biological Warfare (BW) Agents Protected Against	Not specified
Toxic Industrial (TIMs) Protected Against	A broad range of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 648, or go to www.dupont.com/tyvek/protective-apparel .

Duration of Protection	Fabric test data: Average breakthrough time GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m^2 GB, HD, and VX: Greater than 12 h at 100 g/m^2 (total coverage) L: Greater than 2 h at 100 g/m^2 (total coverage). For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 636, or go to www.dupont.com/tyvek/protective-apparel .
Recommended Use(s)	Emergency response, crisis management, remediation, secondary decon in hospital or emergency area, and warm zone decon

Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	4 lb/ctn and 2 units/ctn
Package Size and Volume	16 in L x 10 1/4 in W x 14 1/8 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Thermo Bond seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress.
Color	Yellow or olive drab

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility
Consumables	None
Maintenance Requirements	Visual inspection prior to use
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating “for training use only” after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user. Compatible with all commercial cooling systems.
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	$145/carton
Maintenance Cost	Minimum labor cost for routine suit inspection
Warranty	90 d for workmanship and materials
Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal.

Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.
Launderability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, eye/face, hand, and head protection
Testing Information	Physical properties: Basis weight (ASTM D3776–85) 6.6 oz/yd^2 Thickness (ASTM D1777–64) 16 mils Ball burst (ASTM D3787–89) 90 psi Breaking strength—Grab (md/xd) (ASTM D5034) 90/84 lbs. Tearing strength—Trapezoid (md/xd) (ASTM D5597) 19/19 lbs. Permeation data available by calling 1–877–797–5907 or go to www.dupont.com/tyvek/protective-apparel
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Not applicable
EOD Compatibility	Compatible with EOD suit

General

Name *Tychem® BR Coverall*

ID# 131

Technology Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number 95256

Protection Type Percutaneous

Equipment Category Coverall; zipper front, hood, sock boot/flap, and elastic wrist

Availability Commercially available

Current User(s) U.S. government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer
DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800–845–6962 (Tel)
843–335–8599 (Fax)
e-mail: tyvekinf@usa.dupont.com

Manufacturer Type Domestic manufacturer

Developer DuPont Protective Apparel

Source
DuPont Tyvek® Protective Apparel
e-mail: Mary-Ann.Daniel@usa.dupont.com
888–577–6960 (Tel)
POC: M. A. Daniel

Certification Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against Nerve agents (GA, GB, GD and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request Document 595.

Biological Warfare (BW) Agents Protected Against Not specified

Toxic Industrial (TIMs) Protected Against	A broad range of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 648, or go to www.dupont.com/tyvek/protective-apparel .
Duration of Protection	Fabric test data: Average breakthrough time GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m^2 GB, HD, and VX: Greater than 12 h at 100 g/m^2 (total coverage) L: Greater than 2 h at 100 g/m^2 (total coverage). For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 636, or go to www.dupont.com/tyvek/protective-apparel .
Recommended Use(s)	Emergency response, crisis management, remediation, secondary decon in hospital or emergency area, and warm zone decon

Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	4 lb/ctn and 2 units/ctn
Package Size and Volume	16 in L x 10 1/4 in W x 14 1/8 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Thermo Bond seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress.
Color	Yellow or olive drab

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility
Consumables	None
Maintenance Requirements	Visual inspection prior to use
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating “for training use only” after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user. Compatible with all commercial cooling systems.
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	$130/carton
Maintenance Cost	Minimum labor cost for routine suit inspection

Warranty	90 d for workmanship and materials
Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal.
Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.
Launderability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, eye/face, hand, and head protection
Testing Information	Physical properties: Basis weight (ASTM D3776–85) 6.6 oz/yd^2 Thickness (ASTM D1777–64) 16 mils Ball burst (ASTM D3787–89) 90 psi Breaking strength—Grab (md/xd) (ASTM D5034) 90/84 lbs. Tearing strength—Trapezoid (md/xd) (ASTM D5597) 19/19 lbs. Permeation data available by calling 1–877–797–5907 or go to www.dupont.com/tyvek/protective-apparel
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Not applicable
EOD Compatibility	Compatible with EOD suit

General

Name ***Tychem® TK Coverall***

ID# 132

Technology Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number TK120

Protection Type Percutaneous

Equipment Category Coverall; zipper-front

Availability Commercially available

Current User(s) U.S. government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer
DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800–845–6962 (Tel)
843–335–8599 (Fax)
e-mail: tyvekinf@usa.dupont.com

Manufacturer Type Domestic manufacturer

Developer DuPont Protective Apparel

Source
DuPont Tyvek® Protective Apparel
e-mail: Mary-Ann.Daniel@usa.dupont.com
POC: M. A. Daniel
888–577–6960 (Tel)

Certification Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request Document 595.

Biological Warfare (BW) Agents Protected Against Not specified

Toxic Industrial (TIMs) Protected Against	Excellent protection against a wide variety of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel .
Duration of Protection	Fabric test data: Average breakthrough time GB, HD, VX, and L: Greater than 12 h at 100 g/m^2 (total coverage) GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m^2. For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel .
Recommended Use(s)	Emergency response, crisis management, remediation, secondary decon in hospital or emergency area, and warm zone decon

Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	6 lb/ctn and 2 units/ctn
Package Size and Volume	16 in L x 10 1/4 in W x 14 1/8 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Thermo Bond seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress.
Color	High-visibility lime yellow

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility
Consumables	None
Maintenance Requirements	Visual inspection prior to use
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating “for training use only” after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user. Compatible with all commercial cooling systems.
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	$159/carton
Maintenance Cost	Minimum labor cost for routine suit inspection

Warranty	90 d for workmanship and materials
Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal.
Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.
Launderability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, eye/face, hand, and head protection
Testing Information	Physical properties: Basis weight (ASTM D3776) 10.6 oz/yd^2 Thickness (ASTM D1777) 26 mils Ball burst (ASTM D3787) 187 psi Breaking strength—Grab (md/xd) (ASTM D15034) 188/180 lbs. Tearing strength—Trapezoid (md/xd) (ASTM D5733) 53/52 lbs. Permeation data available by calling 1–877–797–5907 or go to www.dupont.com/tyvek/protective-apparel
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Not applicable
EOD Compatibility	Compatible with EOD suit

General

Name *Tychem® TK Coverall*

ID# 133

Technology Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number TK122

Protection Type Percutaneous

Equipment Category Coverall; zipper-front, hood, boot, and elastic wrist

Availability Commercially available

Current User(s) U.S. government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer
DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800–845–6962 (Tel)
843–335–8599 (Fax)
e-mail: tyvekinf@usa.dupont.com

Manufacturer Type Domestic manufacturer

Developer DuPont Protective Apparel

Source
DuPont Tyvek® Protective Apparel
e-mail: Mary-Ann.Daniel@usa.dupont.com
POC: M. A. Daniel
888–577–6960 (Tel)

Certification Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request Document 595.

Biological Warfare (BW) Agents Protected Against Not specified

Toxic Industrial (TIMs) Protected Against	Excellent protection against a wide variety of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel .
Duration of Protection	Fabric test data: Average breakthrough time GB, HD, VX, and L: Greater than 12 h at 100 g/m^2 (total coverage) GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m^2. For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel .
Recommended Use(s)	Emergency response, crisis management, remediation, secondary decon in hospital or emergency area, and warm zone decon

Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	7 lb/ctn and 2 units/ctn
Package Size and Volume	16 in L x 10 1/4 in W x 14 1/8 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Thermo Bond seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress.
Color	High-visibility lime yellow

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility
Consumables	None
Maintenance Requirements	Visual inspection prior to use.
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating “for training use only” after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user. Compatible with all commercial cooling systems.
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	$185/carton
Maintenance Cost	Minimum labor cost for routine suit inspection

Warranty	90 d for workmanship and materials
Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal.
Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.
Launderability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, eye/face, hand, and head protection
Testing Information	Physical properties: Basis weight (ASTM D3776) 10.6 oz/yd^2 Thickness (ASTM D1777) 26 mils Ball burst (ASTM D3787) 187 psi Breaking strength—Grab (md/xd) (ASTM D15034) 188/180 lbs. Tearing strength—Trapezoid (md/xd) (ASTM D5733) 53/52 lbs. Permeation data available by calling 1–877–797–5907 or go to www.dupont.com/tyvek/protective-apparel
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Not applicable
EOD Compatibility	Compatible with EOD suit

General

Name ***Tychem® TK Coverall***

ID# 134

Technology Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number TK124

Protection Type Percutaneous

Equipment Category Coverall; zipper-front

Availability Commercially available

Current User(s) U.S. government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer
DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800–845–6962 (Tel)
843–335–8599 (Fax)
e-mail: tyvekinf@usa.dupont.com

Manufacturer Type Domestic manufacturer

Developer DuPont Protective Apparel

Source
DuPont Tyvek® Protective Apparel
e-mail: Mary-Ann.Daniel@usa.dupont.com
POC: M. A. Daniel
888–577–6960 (Tel)

Certification Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request Document 595.

Biological Warfare (BW) Agents Protected Against Not specified

Toxic Industrial (TIMs) Protected Against	Excellent protection against a wide variety of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel .
Duration of Protection	Fabric test data: Average breakthrough time GB, HD, VX, and L: Greater than 12 h at 100 g/m^2 (total coverage) GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m^2. For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel .
Recommended Use(s)	Emergency response, crisis management, remediation, secondary decon in hospital or emergency area, and warm zone decon

Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	7 lb/ctn and 2 units/ctn
Package Size and Volume	16 in L x 10 1/4 in W x 14 1/8 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Thermo Bond seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress.
Color	High-visibility lime yellow

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility
Consumables	None
Maintenance Requirements	Visual inspection prior to use
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating “for training use only” after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user. Compatible with all commercial cooling systems.
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	$212/carton
Maintenance Cost	Minimum labor cost for routine suit inspection
Warranty	90 d for workmanship and materials

Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal.
Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.
Launderability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, eye/face, hand, and head protection
Testing Information	Physical properties: Basis weight (ASTM D3776) 10.6 oz/yd^2 Thickness (ASTM D1777) 26 mils Ball burst (ASTM D3787) 187 psi Breaking strength—Grab (md/xd) (ASTM D15034) 188/180 lbs. Tearing strength—Trapezoid (md/xd) (ASTM D5733) 53/52 lbs. Permeation data available by calling 1–877–797–5907 or go to www.dupont.com/tyvek/protective-apparel
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Not applicable
EOD Compatibility	Compatible with EOD suit

General

Name ***Tychem® TK Coverall***

ID# 135

Technology Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number TK125

Protection Type Percutaneous

Equipment Category Coverall; zipper front, elastic wrists, and ankles

Availability Commercially available

Current User(s) U.S. government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer
DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800–845–6962 (Tel)
843–335–8599 (Fax)
e-mail: tyvekinf@usa.dupont.com

Manufacturer Type Domestic manufacturer

Developer DuPont Protective Apparel

Source
DuPont Tyvek® Protective Apparel
e-mail: Mary-Ann.Daniel@usa.dupont.com
POC: M. A. Daniel
888–577–6960 (Tel)

Certification Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request Document 595.

Biological Warfare (BW) Agents Protected Against Not specified

Toxic Industrial (TIMs) Protected Against Excellent protection against a wide variety of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel .

Duration of Protection	Fabric test data: Average breakthrough time GB, HD, VX, and L: Greater than 12 h at 100 g/m^2 (total coverage) GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m^2. For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel .
Recommended Use(s)	Emergency response, crisis management, remediation, secondary decon in hospital or emergency area, and warm zone decon

Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	7 lb/ctn and 2 units/ctn
Package Size and Volume	16 in L x 10 1/4 in W x 14 1/8 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Thermo Bond seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress.
Color	High-visibility lime yellow

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility
Consumables	None
Maintenance Requirements	Visual inspection prior to use
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating “for training use only” after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user. Compatible with all commercial cooling systems.
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	$165/carton
Maintenance Cost	Minimum labor cost for routine suit inspection
Warranty	90 d for workmanship and materials
Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal.
Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.

Launderability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, eye/face, hand, and head protection
Testing Information	Physical properties: Basis weight (ASTM D3776) 10.6 oz/yd^2 Thickness (ASTM D1777) 26 mils Ball burst (ASTM D3787) 187 psi Breaking strength—Grab (md/xd) (ASTM D15034) 188/180 lbs. Tearing strength—Trapezoid (md/xd) (ASTM D5733) 53/52 lbs. Permeation data available by calling 1–877–797–5907 or go to www.dupont.com/tyvek/protective-apparel
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Not applicable
EOD Compatibility	Compatible with EOD suit

WORKING DRAFT

General

Name — ***Tychem® TK Coverall***

ID# 136

Technology — Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number — TK127

Protection Type — Percutaneous

Equipment Category — Coverall; zipper front, hood, elastic wrists, and ankles

Availability — Commercially available

Current User(s) — U.S. government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer —
DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800–845–6962 (Tel)
843–335–8599 (Fax)
e-mail: tyvekinf@usa.dupont.com

Manufacturer Type — Domestic manufacturer

Developer — DuPont Protective Apparel

Source —
DuPont Tyvek® Protective Apparel
e-mail: Mary-Ann.Daniel@usa.dupont.com
POC: M. A. Daniel
888–577–6960 (Tel)

Certification — Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against — Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request Document 595.

Biological Warfare (BW) Agents Protected Against — Not specified

Toxic Industrial (TIMs) Protected Against	Excellent protection against a wide variety of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel .
Duration of Protection	Fabric test data: Average breakthrough time GB, HD, VX, and L: Greater than 12 h at 100 g/m^2 (total coverage) GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m^2. For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel .
Recommended Use(s)	Emergency response, crisis management, remediation, secondary decon in hospital or emergency area, and warm zone decon

Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	6 lb/ctn and 2 units/ctn
Package Size and Volume	16 in L x 10 1/4 in W x 14 1/8 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Thermo Bond seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress.
Color	High-visibility lime yellow

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility
Consumables	None
Maintenance Requirements	Visual inspection prior to use
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating “for training use only” after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user. Compatible with all commercial cooling systems.
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	$175/carton
Maintenance Cost	Minimum labor cost for routine suit inspection
Warranty	90 d for workmanship and materials

Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal.
Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.
Launderability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, eye/face, hand, and head protection
Testing Information	Physical properties: Basis weight (ASTM D3776) 10.6 oz/yd^2 Thickness (ASTM D1777) 26 mils Ball burst (ASTM D3787) 187 psi Breaking strength—Grab (md/xd) (ASTM D15034) 188/180 lbs. Tearing strength—Trapezoid (md/xd) (ASTM D5733) 53/52 lbs. Permeation data available by calling 1–877–797–5907 or go to www.dupont.com/tyvek/protective-apparel
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Not applicable
EOD Compatibility	Compatible with EOD suit

General

Name — ***Tychem® TK Coverall***

ID# 137

Technology	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Stock Number	TK256
Protection Type	Percutaneous
Equipment Category	Coverall; zipper front, hood, sock boots with flap, and elastic wrist
Availability	Commercially available
Current User(s)	U.S. government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.
Manufacturer	DuPont Tyvek® Protective Apparel U.S. Highway #1 North McBee, SC 29101 800–845–6962 (Tel) 843–335–8599 (Fax) e-mail: tyvekinf@usa.dupont.com
Manufacturer Type	Domestic manufacturer
Developer	DuPont Protective Apparel
Source	DuPont Tyvek® Protective Apparel e-mail: Mary-Ann.Daniel@usa.dupont.com POC: M. A. Daniel 888–577–6960 (Tel)
Certification	Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against	Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request Document 595.
Biological Warfare (BW) Agents Protected Against	Not specified

Toxic Industrial (TIMs) Protected Against	Excellent protection against a wide variety of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel .
Duration of Protection	Fabric test data: Average breakthrough time GB, HD, VX, and L: Greater than 12 h at 100 g/m^2 (total coverage) GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m^2. For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel .
Recommended Use(s)	Emergency response, crisis management, remediation, secondary decon in hospital or emergency area, and warm zone decon

Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	7 lb/ctn and 2 units/ctn
Package Size and Volume	16 in L x 10 1/4 in W x 14 1/8 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Thermo Bond seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress.
Color	High-visibility lime yellow

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility
Consumables	None
Maintenance Requirements	Visual inspection prior to use
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating “for training use only” after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user. Compatible with all commercial cooling systems.
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	$208/carton
Maintenance Cost	Minimum labor cost for routine suit inspection
Warranty	90 d for workmanship and materials

Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal.
Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.
Launderability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, eye/face, hand, and head protection
Testing Information	Physical properties: Basis weight (ASTM D3776) 10.6 oz/yd^2 Thickness (ASTM D1777) 26 mils Ball burst (ASTM D3787) 187 psi Breaking strength—Grab (md/xd) (ASTM D15034) 188/180 lbs. Tearing strength—Trapezoid (md/xd) (ASTM D5733) 53/52 lbs. Permeation data available by calling 1–877–797–5907 or go to www.dupont.com/tyvek/protective-apparel
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Not applicable
EOD Compatibility	Compatible with EOD suit

General

Name — ***Tychem® TK Coverall***

ID# 138

Picture Not Available

Technology — Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics

Stock Number — TK187

Protection Type — Percutaneous

Equipment Category — Coverall; zipper front, hood, expanded back, sock boots with flaps, and elastic wrists

Availability — Commercially available

Current User(s) — U.S. government/military, local government/fire department, emergency response teams, general industry, remediation companies, and chemical manufacturing. Specific organizations currently using item available upon request.

Manufacturer —
DuPont Tyvek® Protective Apparel
U.S. Highway #1 North
McBee, SC 29101
800–845–6962 (Tel)
843–335–8599 (Fax)
e-mail: tyvekinf@usa.dupont.com

Manufacturer Type — Domestic manufacturer

Developer — DuPont Protective Apparel

Source —
DuPont Tyvek® Protective Apparel
e-mail: Mary-Ann.Daniel@usa.dupont.com
POC: M. A. Daniel
888–577–6960 (Tel)

Certification — Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against — Nerve agents (GA, GB, GD, and VX); blister agents (HD and L). For specific test results, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request Document 595.

Biological Warfare (BW) Agents Protected Against — Not specified

Toxic Industrial (TIMs) Protected Against — Excellent protection against a wide variety of TIMs. For specific test data, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel .

Duration of Protection	Fabric test data: Average breakthrough time GB, HD, VX, and L: Greater than 12 h at 100 g/m^2 (total coverage) GA, GB, GD, HD, L, and VX: Greater than 12 h at 10 g/m^2. For specific test data on TIMs, call the DuPont Protective Apparel Fax-on-Demand Service at 800–558–9329 and request document 651, or go to www.dupont.com/tyvek/protective-apparel .
Recommended Use(s)	Emergency response, crisis management, remediation, secondary decon in hospital or emergency area, and warm zone decon

Physical Parameters

Sizes Available	S through XXXXL. Additional sizes available upon request.
Weight	7 lb/ctn and 2 units/ctn
Package Size and Volume	16 in L x 10 1/4 in W x 14 1/8 in H
Power Requirements	Not applicable
Material Type	Selectively impermeable composite consisting of thermoplastic barrier films laminated to high strength thermoplastic nonwoven fabrics
Construction Type	Thermo Bond seam—sewn and taped. This exceptionally strong and chemical resistant seam construction provides a reliable barrier against heavy liquid splashes and rigorous seam stress.
Color	High-visibility lime yellow

Logistical Parameters

Ease of Use	Ergonomically designed for maximum mobility and flexibility. Very flexible with wide range of vision. Compatible with most commercial SCBA equipment.
Consumables	None
Maintenance Requirements	Visual inspection prior to use
Shelf Life	Store in a cool, dry environment in original packaging. Manufacturer recommends designating “for training use only” after 5 yr of storage.
Transportability	Easily transported
Operational Limitations	Directly relates to the physical condition of user. Compatible with all commercial cooling systems.
Environmental Conditions	Can be used in all common outdoor weather conditions and climates. Rain, snow, extreme temperatures and humidity will have no effect on the suit.
Unit Cost	$245/carton
Maintenance Cost	Minimum labor cost for routine suit inspection
Warranty	90 d for workmanship and materials
Don/Doff Information	No assistance required for donning and doffing. Average donning and doffing time is minimal.

Use/Reuse	Discard after use. Decontamination specific to chemical exposure. Disposal per jurisdictional regulations.
Launderability	Not applicable. Not intended for reuse after exposure to toxic chemicals. Dirt and dust can be manually removed with soap and water.
Accessories	None

Special Requirements

Training Requirements	No special training required
Training Available	Yes. DuPont will provide specialized group training upon request.
Manuals Available	Permeation Guide available
Surveillance Testing Requirements	Visual inspection (for holes and tears) prior to use
Support Equipment	Appropriate respiratory, foot, eye/face, hand, and head protection
Testing Information	Physical properties: Basis weight (ASTM D3776) 10.6 oz/yd^2 Thickness (ASTM D1777) 26 mils Ball burst (ASTM D3787) 187 psi Breaking strength—Grab (md/xd) (ASTM D15034) 188/180 lbs. Tearing strength—Trapezoid (md/xd) (ASTM D5733) 53/52 lbs. Permeation data available by calling 1–877–797–5907 or go to www.dupont.com/tyvek/protective-apparel
Applicable Regulations	None
Health Hazards	None
Communications Interface Capability	Not applicable
EOD Compatibility	Compatible with EOD suit

WORKING DRAFT

General

Name ***Kappler Coverall***

ID# 139

Technology Multi-layer barrier film laminated to a durable 2.0 oz polypropylene substrate. Provides protection in rigorous activities and where there is potential for chemical splash.

Stock Number 3T424

Protection Type Percutaneous

Equipment Category Coverall; zipper front, attached hood, and sock boots. (Sock boots to be worn inside regular work boots). Elastic wrists.

Availability In stock

Current User(s) Emergency HAZMAT teams, fire departments, and law enforcement

Manufacturer
Kappler Safety Group
70 Grimes Drive
Guntersville, AL 35976
www.kappler.com
POC: Kendra Barclay
256–505–4000 (Tel)
256–582–1163 (Fax)
email: kbarclay@kappler.com

Manufacturer Type Domestic

Developer
Kappler Protective Apparel and Fabrics
70 Grimes Drive
Gunterville, AL 35976

Source www.kappler.com

Certification Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against HD, GB, GD, and VX

Biological Warfare (BW) Agents Protected Against Not applicable

Toxic Industrial (TIMs) Protected Against Contact Kappler for permeation guides

Duration of Protection	Contact Kappler for permeation guides
Recommended Use(s)	Emergency hazmat teams, chemical handling, chemical warfare protection, hazardous wastes, and materials cleanups

Physical Parameters

Sizes Available	S-XL, 2X, and 3X
Weight	Average packaging weight is 12 lb per case of six
Package Size and Volume	Not specified
Power Requirements	Not applicable
Material Type	Multi-layer barrier film laminated to a durable 2.0 oz polypropylene substrate. Greater physical strength and chemical holdout protection when compared to other film products. Provides protection in rigorous activities and where there is potential for chemical splash.
Construction Type	Taped seam—seam produced when a sewn seam is covered with a strip of compatible material. The strip is attached by heat-sealing as with film laminated materials.
Color	Tan

Logistical Parameters

Ease of Use	Some instruction required
Consumables	Not applicable
Maintenance Requirements	Suits should be stored in a cool dry area away from direct sunlight. Garments should have a visual test upon arrival from manufacture, annually and/or after each use and a quick reinspection before each use.
Shelf Life	Under proper storage conditions, there is no evidence to indicate that the System CPF® film composite fabrics lose their protective characteristics or physical properties over time. This conclusion is based on the comparative testing of "aged" and new Responder® fabric. Chemical suits contain components made from various polymer or rubber materials for which there is no specific shelf life data currently available. Based on the physical condition of the suit, it is recommended that downgrading suits to "training use only" be considered when they no longer pass the visual inspection and/or pressure test.
Transportability	Not applicable
Operational Limitations	There are uses and chemicals for which these garments are unsuitable. It is the responsibility of the user to review available data and verify that the garment is appropriate for the intended use and meets all specified government and industry standards.
Environmental Conditions	Protective clothing is used under a variety of conditions. Garments can be exposed to a range of ambient temperatures as well as variations in the temperatures of the challenge chemical. The temperature service range for Responder and CPF 1–4 fabrics was established by performing tests at high and low temperatures.
Unit Cost	Contact customer service for pricing

Maintenance Cost	Product is designed for limited use
Warranty	It is the responsibility of the user to select suits which are appropriate for each intended use and which meet all health standards. Kappler is available for consultation on any proposed use. Purchaser and all suit users shall promptly notify Kappler of any claim, whether based on contract, negligence, strict liability or otherwise. The sole and exclusive remedy of the purchaser and all users and the limit of liability of Kappler for any and all losses, injuries or damages resulting from use of a Kappler product shall be the refund of the purchase price or the replacement or repair of product found to be defective within 90 d after the product is delivered. In no event shall Kappler be liable for any special, incidental or consequential damages, whether in contract or in tort, arising out of any warranties, representations, instructions or defects from any cause in connection with the Kappler products, or the sale thereof. The purchaser and the users are deemed to have accepted the terms of this limitation of warranty and liability, which terms may not be varied by any verbal or written agreement. Purchaser and all users are responsible for inspection and proper care of this product as described in this manual and are responsible for all loss or damage from use or handling that results from conditions beyond the control of the manufacturer.
Don/Doff Information	See instruction manual for donning and doffing instructions
Use/Reuse	See instruction manual for suggestions on decontamination
Launderability	See instruction manual for suggestions on decontamination
Accessories	Additional accessories that may be purchased include chemtape, kooljacket, Tingley hazmat boots, and decon shower

Special Requirements

Training Requirements	Some instruction required
Training Available	Training video and Suit Smart CD
Manuals Available	Not applicable
Surveillance Testing Requirements	Visual inspections upon receipt from manufacture, after each use and/or annually, before each use
Support Equipment	Appropriate respiratory equipment
Testing Information	Contact Kappler for permeation guides
Applicable Regulations	OSHA 1910.132 and OSHA 1910.120
Health Hazards	Not applicable
Communications Interface Capability	Not applicable
EOD Compatibility	Not applicable

General

Name ***Kappler Coverall***

ID# 140

Technology Multi-layer barrier film laminated to a durable 2.0 oz polypropylene substrate. Provides protection in rigorous activities and where there is potential for chemical splash.

Stock Number 3T426

Protection Type Percutaneous

Equipment Category Coverall; zipper front with single storm flap, attached hood and sock boots with boot flaps (splash guards). (Sock boots to be worn inside regular work boots). Elastic wrists.

Availability In stock

Current User(s) Emergency HAZMAT teams, fire departments, and law enforcement

Manufacturer
Kappler Safety Group
70 Grimes Drive
Guntersville, AL 35976
www.kappler.com
POC: Kendra Barclay
256–505–4000 (Tel)
256–582–1163 (Fax)
email: kbarclay@kappler.com

Manufacturer Type Domestic

Developer
Kappler Protective Apparel and Fabrics
70 Grimes Drive
Gunterville, AL 35976

Source www.kappler.com

Certification Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against HD, GB, GD, and VX

Biological Warfare (BW) Agents Protected Against Not applicable

Toxic Industrial (TIMs) Protected Against	Contact Kappler for permeation guides
Duration of Protection	Contact Kappler for permeation guides
Recommended Use(s)	Emergency hazmat teams, chemical handling, chemical warfare protection, hazardous wastes, and materials cleanups

Physical Parameters

Sizes Available	S-XL, 2X, and 3X
Weight	Average packaging weight is 12 lb per case of six
Package Size and Volume	Not specified
Power Requirements	Not applicable
Material Type	Multi-layer barrier film laminated to a durable 2.0 oz polypropylene substrate. Greater physical strength and chemical holdout protection when compared to other film products. Provides protection in rigorous activities and where there is potential for chemical splash.
Construction Type	Taped seam—seam produced when a sewn seam is covered with a strip of compatible material. The strip is attached by heat-sealing as with film laminated materials.
Color	Tan

Logistical Parameters

Ease of Use	Some instruction required
Consumables	Not applicable
Maintenance Requirements	Suits should be stored in a cool dry area away from direct sunlight. Garments should have a visual test upon arrival from manufacture, annually and/or after each use and a quick reinspection before each use.
Shelf Life	Under proper storage conditions, there is no evidence to indicate that the System CPF® film composite fabrics lose their protective characteristics or physical properties over time. This conclusion is based on the comparative testing of "aged" and new Responder® fabric. Chemical suits contain components made from various polymer or rubber materials for which there is no specific shelf life data currently available. Based on the physical condition of the suit, it is recommended that downgrading suits to "training use only" be considered when they no longer pass the visual inspection and/or pressure test.
Transportability	Not applicable
Operational Limitations	There are uses and chemicals for which these garments are unsuitable. It is the responsibility of the user to review available data and verify that the garment is appropriate for the intended use and meets all specified government and industry standards.

Environmental Conditions

Protective clothing is used under a variety of conditions. Garments can be exposed to a range of ambient temperatures as well as variations in the temperatures of the challenge chemical. The temperature service range for Responder and CPF 1–4 fabrics was established by performing tests at high and low temperatures. The high temperature was established by ASTM D751, "Test Methods for Coated Fabrics," using the high temperature blocking test. In this test, the sample fabric material is subjected to the predetermined temperature for a period of time while the fabric is placed in contact with itself. The test was run at 200 °F (93 °C) and the fabrics were considered nonblocking at that temperature. The low temperature was established by ASTM D 2136, "Standard Test Method for Coated Fabrics—Low Temperature Bend Test." This test subjects the fabric material to a predetermined low temperature for a period of time while the material is flexed in a 60° bend. The sample is then examined visually for signs of cracking or other damage. The test was run at –85 °F (-65 °C) and the fabrics showed no signs of damage.

Unit Cost

Contact customer service for pricing

Maintenance Cost

Product is designed for limited use

Warranty

It is the responsibility of the user to select suits which are appropriate for each intended use and which meet all health standards. Kappler is available for consultation on any proposed use. Purchaser and all suit users shall promptly notify Kappler of any claim, whether based on contract, negligence, strict liability or otherwise. The sole and exclusive remedy of the purchaser and all users and the limit of liability of Kappler for any and all losses, injuries or damages resulting from use of a Kappler product shall be the refund of the purchase price or the replacement or repair of product found to be defective within 90 d after the product is delivered. In no event shall Kappler be liable for any special, incidental or consequential damages, whether in contract or in tort, arising out of any warranties, representations, instructions or defects from any cause in connection with the Kappler products, or the sale thereof. The purchaser and the users are deemed to have accepted the terms of this limitation of warranty and liability, which terms may not be varied by any verbal or written agreement. Purchaser and all users are responsible for inspection and proper care of this product as described in this manual and are responsible for all loss or damage from use or handling that results from conditions beyond the control of the manufacturer.

Don/Doff Information

See instruction manual for donning and doffing instructions

Use/Reuse

See instruction manual for suggestions on decontamination

Launderability

See instruction manual for suggestions on decontamination

Accessories

Additional accessories that may be purchased include chemtape, kooljacket, Tingley hazmat boots, and decon shower

Special Requirements

Training Requirements

Some instruction required

Training Available

Training video and Suit Smart CD

Manuals Available	Not applicable
Surveillance Testing Requirements	Visual inspections upon receipt from manufacture, after each use and/or annually, before each use
Support Equipment	Appropriate respiratory equipment
Testing Information	Contact Kappler for permeation guides
Applicable Regulations	OSHA 1910.132 and OSHA 1910.120
Health Hazards	Not applicable
Communications Interface Capability	Not applicable
EOD Compatibility	Not applicable

General

Name ***Kappler CPF 3 Coverall***

ID# 141

Technology Multi-layer barrier film laminated to a durable 2.0 oz polypropylene substrate. Provides protection in rigorous activities and where there is potential for chemical splash.

Stock Number 3T438. Pictured is 3T428.

Protection Type Percutaneous

Equipment Category Coverall; zipper front, attached hoot, elastic wrists, and ankles

Availability In stock

Current User(s) Emergency HAZMAT teams, fire departments, and law enforcement

Manufacturer
Kappler Safety Group
70 Grimes Drive
Guntersville, AL 35976
www.kappler.com
POC: Kendra Barclay
256–505–4000 (Tel)
256–582–1163 (Fax)
email: kbarclay@kappler.com

Manufacturer Type Domestic

Developer
Kappler Protective Apparel and Fabrics
70 Grimes Drive
Gunterville, AL 35976

Source www.kappler.com

Certification Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against HD, GB, GD, and VX

Biological Warfare (BW) Agents Protected Against Not applicable

Toxic Industrial (Times) Protected Against	Contact Kappler for permeation guides
Duration of Protection	Contact Kappler for permeation guides
Recommended Use(s)	Emergency HAZMAT teams, chemical handling, chemical warfare protection, hazardous wastes, and materials cleanups

Physical Parameters

Sizes Available	S-XL, 2X, and 3X
Weight	Average packaging weight is 10 lb per case of six
Package Size and Volume	Not specified
Power Requirements	Not applicable
Material Type	Multi-layer barrier film laminated to a durable 2.0 oz polypropylene substrate. Greater physical strength and chemical holdout protection when compared to other film products. Provides protection in rigorous activities and where there is potential for chemical splash.
Construction Type	Taped seam—seam produced when a sewn seam is covered with a strip of compatible material. The strip is attached by heat-sealing as with film laminated materials.
Color	Tan

Logistical Parameters

Ease of Use	Some instruction required
Consumables	Not applicable
Maintenance Requirements	Suits should be stored in a cool dry area away from direct sunlight. Garments should have a visual test upon arrival from manufacture, annually and/or after each use and a quick reinspection before each use.
Shelf Life	Under proper storage conditions, there is no evidence to indicate that the System CPF® film composite fabrics lose their protective characteristics or physical properties over time. This conclusion is based on the comparative testing of "aged" and new Responder® fabric. Chemical suits contain components made from various polymer or rubber materials for which there is no specific shelf life data currently available. Based on the physical condition of the suit, it is recommended that downgrading suits to "training use only" be considered when they no longer pass the visual inspection and/or pressure test.
Transportability	Not applicable
Operational Limitations	There are uses and chemicals for which these garments are unsuitable. It is the responsibility of the user to review available data and verify that the garment is appropriate for the intended use and meets all specified government and industry standards.

Environmental Conditions	Protective clothing is used under a variety of conditions. Garments can be exposed to a range of ambient temperatures as well as variations in the temperatures of the challenge chemical. The temperature service range for Responder and CPF 1–4 fabrics was established by performing tests at high and low temperatures. The high temperature was established by ASTM D751, "Test Methods for Coated Fabrics," using the high temperature blocking test. In this test, the sample fabric material is subjected to the predetermined temperature for a period of time while the fabric is placed in contact with itself. The test was run at 200 °F (93 °C) and the fabrics were considered nonblocking at that temperature. The low temperature was established by ASTM D 2136, "Standard Test Method for Coated Fabrics—Low Temperature Bend Test." This test subjects the fabric material to a predetermined low temperature for a period of time while the material is flexed in a 60° bend. The sample is then examined visually for signs of cracking or other damage. The test was run at -85 °F (-65 °C) and the fabrics showed no signs of damage.
Unit Cost	Contact customer service for pricing
Maintenance Cost	Product is designed for limited use
Warranty	It is the responsibility of the user to select suits which are appropriate for each intended use and which meet all health standards. Kappler is available for consultation on any proposed use. Purchaser and all suit users shall promptly notify Kappler of any claim, whether based on contract, negligence, strict liability or otherwise. The sole and exclusive remedy of the purchaser and all users and the limit of liability of Kappler for any and all losses, injuries or damages resulting from use of a Kappler product shall be the refund of the purchase price or the replacement or repair of product found to be defective within 90 d after the product is delivered. In no event shall Kappler be liable for any special, incidental or consequential damages, whether in contract or in tort, arising out of any warranties, representations, instructions or defects from any cause in connection with the Kappler products, or the sale thereof. The purchaser and the users are deemed to have accepted the terms of this limitation of warranty and liability, which terms may not be varied by any verbal or written agreement. Purchaser and all users are responsible for inspection and proper care of this product as described in this manual and are responsible for all loss or damage from use or handling that results from conditions beyond the control of the manufacturer.
Don/Doff Information	See instruction manual for donning and doffing instructions
Use/Reuse	See instruction manual for suggestions on decontamination
Launderability	See instruction manual for suggestions on decontamination
Accessories	Additional accessories that may be purchased include chemtape, kooljacket, Tingley HAZMAT boots, and decon shower

Special Requirements

Training Requirements	Some instruction required
Training Available	Training video and Suit Smart CD

Manuals Available	Not applicable
Surveillance Testing Requirements	Visual inspections upon receipt from manufacture, after each use and/or annually, before each use
Support Equipment	Appropriate respiratory equipment
Testing Information	Contact Kappler for permeation guides
Applicable Regulations	OSHA 1910.132 and OSHA 1910.120
Health Hazards	Not applicable
Communications Interface Capability	Not applicable
EOD Compatibility	Not applicable

General

Name ***Kappler Responder® Level B Coverall***

ID# 142

Picture Not Available

Technology Limited-use patented fabric consisting of multiple barrier films laminated to both sides of a tough substrate material

Stock Number 41250

Protection Type Level B, Percutaneous

Equipment Category Level B, coverall, zipper front, collar, elastic wrists, and ankles

Availability In stock

Current User(s) Fire departments, HAZMAT response teams, and law enforcement

Manufacturer

Kappler Safety Group
70 Grimes Drive
Guntersville, AL 35976
www.kappler.com
POC: Kendra Barclay
256–505–4000 (Tel)
256–582–1163 (Fax)
email: kbarclay@kappler.com

Manufacturer Type Domestic

Developer

Kappler Protective Apparel and Fabrics
70 Grimes Drive
Gunterville, AL 35976

Source www.kappler.com

Certification None

Operational Parameters

Chemical Warfare (CW) Agents Protected Against HD, GB, GD, L, and VX

Biological Warfare (BW) Agents Protected Against Not applicable

Toxic Industrial (TIMs) Protected Against Contact Kappler for permeation guides

Duration of Protection Contact Kappler for permeation guides

Recommended Use(s) Emergency HAZMAT teams, chemical handling, and chemical warfare protection and when protection is needed against potential flash fire and/or NFPA certified garments are required.

Physical Parameters

Sizes Available	S, M, L, XL, 2X, and 3X
Weight	Average packaging weight is 9 lb
Package Size and Volume	Not specified
Power Requirements	Not applicable
Material Type	Limited-use patented fabric consisting of multiple barrier films laminated to both sides of a tough substrate material
Construction Type	Seams are double taped—produced when a sewn seam is covered with a strip of compatible material on both the inside and the outside of the suit. The strip is attached by heat-sealing as with film laminated fabrics.
Color	Blue

Logistical Parameters

Ease of Use	Some instruction required
Consumables	Not applicable
Maintenance Requirements	Suits should be stored in a cool dry area away from direct sunlight. Level A garments should have a visual test and be pressure tested according to the ASTM F1052 Air Pressure Test Method upon arrival from manufacture, annually and/or after each use and a quick reinspection before each use.
Shelf Life	Under proper storage conditions, there is no evidence to indicate that the System CPF® film composite fabrics lose their protective characteristics or physical properties over time. This conclusion is based on the comparative testing of "aged" and new Responder® fabric. Chemical suits contain components made from various polymer or rubber materials for which there is no specific shelf life data currently available. Based on the physical condition of the suit, it is recommended that downgrading suits to "Training Use Only" be considered when they no longer pass the visual inspection and/or pressure test.
Transportability	Not applicable
Operational Limitations	There are uses and chemicals for which these garments are unsuitable. It is the responsibility of the user to review available data and verify that the garment is appropriate for the intended use and meets all specified government and industry standards. CAUTION: Do not use for fire protection. Avoid open flame or intense heat.
Environmental Conditions	Protective clothing is used under a variety of conditions. Garments can be exposed to a range of ambient temperatures as well as variations in the temperatures of the challenge chemical. The temperature service range for Responder and CPF 1–4 fabrics was established by performing tests at high and low temperatures. The high temperature was established by ASTM D751, “Test Methods for Coated Fabrics,” using the high temperature blocking test. In this test, the sample fabric material is subjected to the predetermined temperature for a period of time while the fabric is placed in contact with itself. The test was run at 200 °F (93 °C) and the fabrics were considered nonblocking at that temperature. The low temperature was established by ASTM D 2136, “Standard Test Method for Coated Fabrics - Low Temperature Bend Test.” This test subjects the

	fabric material to a predetermined low temperature for a period of time while the material is flexed in a 60° bend. The sample is then examined visually for signs of cracking or other damage. The test was run at -85 °F (-65 °C) and the fabrics showed no signs of damage.
Unit Cost	Contact customer service for pricing
Maintenance Cost	Product is designed for limited use
Warranty	It is the responsibility of the user to select suits which are appropriate for each intended use and which meet all health standards. Kappler is available for consultation on any proposed use. Purchaser and all suit users shall promptly notify Kappler of any claim, whether based on contract, negligence, strict liability or otherwise. The sole and exclusive remedy of the purchaser and all users and the limit of liability of Kappler for any and all losses, injuries or damages resulting from use of a Kappler product shall be the refund of the purchase price or the replacement or repair of product found to be defective within 90 d after the product is delivered. In no event shall Kappler be liable for any special, incidental or consequential damages, whether in contract or in tort, arising out of any warranties, representations, instructions or defects from any cause in connection with the Kappler products, or the sale thereof. The purchaser and the users are deemed to have accepted the terms of this limitation of warranty and liability, which terms may not be varied by any verbal or written agreement. Purchaser and all users are responsible for inspection and proper care of this product as described in this manual and are responsible for all loss or damage from use or handling that results from conditions beyond the control of the manufacturer.
Don/Doff Information	See Level B instruction manual for instructions on donning and doffing
Use/Reuse	See Level B instruction manual for suggestions on decontamination
Launderability	See Level B instruction manual for suggestions on decontamination
Accessories	Additional accessories that may be purchased include chemtape, kooljacket, Tingley HAZMAT boot, and decon shower

Special Requirements

Training Requirements	Some instruction required
Training Available	Level B instruction manual, training video, and Suit Smart CD
Manuals Available	Level B instruction manual
Surveillance Testing Requirements	Visual inspection and in the case of Level A garments pressure testing according to ASTM F1052 upon receipt from manufacturer, after each use and/or annually, and before reuse
Support Equipment	Appropriate respiratory equipment
Testing Information	See attached permeation guides
Applicable Regulations	OSHA 1910.132 and OSHA 1910.120

Health Hazards	Not applicable
Communications Interface Capability	Not applicable
EOD Compatibility	Not applicable

General

Name ***Kappler Responder® Level B Coverall***

ID# 143

Technology Limited-use patented fabric consisting of multiple barrier films laminated to both sides of a tough substrate material

Stock Number 41255

Protection Type Level B, Percutaneous

Equipment Category Level B, coverall, zipper front with storm flap, attached hood with elastic around face opening, elastic wrists, and ankles

Availability In stock

Current User(s) Emergency HAZMAT teams, fire departments, and law enforcement

Manufacturer

Kappler Safety Group
70 Grimes Drive
Guntersville, AL 35976
www.kappler.com
POC: Kendra Barclay
256–505–4000 (Tel)
256–582–1163 (Fax)
email: kbarclay@kappler.com

Manufacturer Type Domestic

Developer

Kappler Protective Apparel and Fabrics
70 Grimes Drive
Gunterville, AL 35976

Source www.kappler.com

Certification Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against HD, GB, GD, L, and VX

Biological Warfare (BW) Agents Protected Against Not applicable

Toxic Industrial (TIMs) Protected Against	Contact Kappler for permeation guides
Duration of Protection	Contact Kappler for permeation guides
Recommended Use(s)	Emergency HAZMAT teams, chemical handling, chemical warfare protection, hazardous wastes, and materials cleanups

Physical Parameters

Sizes Available	S-XL, 2X, and 3X
Weight	Average packaging weight is 4 lb
Package Size and Volume	Not specified
Power Requirements	Not applicable
Material Type	Limited-use patented fabric consisting of multiple barrier films laminated to both sides of a tough substrate material
Construction Type	Taped seam—seam produced when a sewn seam is covered with a strip of compatible material. The strip is attached by heat-sealing as with film laminated materials.
Color	Blue

Logistical Parameters

Ease of Use	Some instruction required
Consumables	Not applicable
Maintenance Requirements	Suits should be stored in a cool dry area away from direct sunlight. Level A garments should have a visual test and be pressure tested according to the ASTM F1052 Air Pressure Test Method upon arrival from manufacture, annually and/or after each use and a quick re-inspection before each use.
Shelf Life	Under proper storage conditions, there is no evidence to indicate that the System CPF® film composite fabrics lose their protective characteristics or physical properties over time. This conclusion is based on the comparative testing of "aged" and new Responder® fabric. Chemical suits contain components made from various polymer or rubber materials for which there is no specific shelf life data currently available. Based on the physical condition of the suit, it is recommended that downgrading suits to "training use only" be considered when they no longer pass the visual inspection and/or pressure test.
Transportability	Not applicable
Operational Limitations	There are uses and chemicals for which these garments are unsuitable. It is the responsibility of the user to review available data and verify that the garment is appropriate for the intended use and meets all specified government and industry standards.

Environmental Conditions

Protective clothing is used under a variety of conditions. Garments can be exposed to a range of ambient temperatures as well as variations in the temperatures of the challenge chemical. The temperature service range for Responder and CPF 1–4 fabrics was established by performing tests at high and low temperatures. The high temperature was established by ASTM D751, "Test Methods for Coated Fabrics," using the high temperature blocking test. In this test, the sample fabric material is subjected to the predetermined temperature for a period of time while the fabric is placed in contact with itself. The test was run at 200 °F (93 °C) and the fabrics were considered non-blocking at that temperature. The low temperature was established by ASTM D 2136, "Standard Test Method for Coated Fabrics—Low Temperature Bend Test." This test subjects the fabric material to a predetermined low temperature for a period of time while the material is flexed in a 60° bend. The sample is then examined visually for signs of cracking or other damage. The test was run at -85 °F (-65 °C) and the fabrics showed no signs of damage.

Unit Cost

Contact customer service for pricing

Maintenance Cost

Product is designed for limited use

Warranty

It is the responsibility of the user to select suits which are appropriate for each intended use and which meet all health standards. Kappler is available for consultation on any proposed use. Purchaser and all suit users shall promptly notify Kappler of any claim, whether based on contract, negligence, strict liability, or otherwise. The sole and exclusive remedy of the purchaser and all users and the limit of liability of Kappler for any and all losses, injuries or damages resulting from use of a Kappler product shall be the refund of the purchase price or the replacement or repair of product found to be defective within 90 d after the product is delivered. In no event shall Kappler be liable for any special, incidental or consequential damages, whether in contract or in tort, arising out of any warranties, representations, instructions or defects from any cause in connection with the Kappler products, or the sale thereof. The purchaser and the users are deemed to have accepted the terms of this limitation of warranty and liability, which terms may not be varied by any verbal or written agreement. Purchaser and all users are responsible for inspection and proper care of this product as described in this manual and are responsible for all loss or damage from use or handling that results from conditions beyond the control of the manufacturer.

Don/Doff Information

See instruction manual for instructions on donning and doffing

Use/Reuse

See instruction manual for suggestions on decontamination

Launderability

See instruction manual for suggestions on decontamination

Accessories

Additional accessories that may be purchased include chemtape, kooljacket, Tingley HAZMAT boots, and decon shower

Special Requirements

Training Requirements

Some instruction required

Training Available

Training video and Suit Smart CD

Manuals Available	Not applicable
Surveillance Testing Requirements	Visual inspection upon receipt from manufacturer, after each use and/or annually, and before each use
Support Equipment	Appropriate respiratory equipment
Testing Information	See attached permeation guides
Applicable Regulations	OSHA 1910.132 and OSHA 1910.120
Health Hazards	Not applicable
Communications Interface Capability	Not applicable
EOD Compatibility	Not applicable

General

Name ***Kappler Responder® Level B Coverall***

ID# 144

Technology Limited-use patented fabric consisting of multiple barrier films laminated to both sides of a tough substrate material

Stock Number 41255–8A
Pictured is 3T428

Protection Type Level B, Percutaneous

Equipment Category Level B, coverall, zipper front, attached respirator hood with elastic, elastic wrists, and ankles

Availability In stock

Current User(s) Emergency HAZMAT teams, fire departments, and law enforcement

Manufacturer
Kappler Safety Group
70 Grimes Drive
Guntersville, AL 35976
www.kappler.com
POC: Kendra Barclay
256–505–4000 (Tel)
256–582–1163 (Fax)
email: kbarclay@kappler.com

Manufacturer Type Domestic

Developer
Kappler Protective Apparel and Fabrics
70 Grimes Drive
Gunterville, AL 35976

Source www.kappler.com

Certification Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against HD, GB, GD, L, and VX

Biological Warfare (BW) Agents Protected Against Not applicable

Toxic Industrial (TIMs) Protected Against Contact Kappler for permeation guides

Duration of Protection	Contact Kappler for permeation guides
Recommended Use(s)	Emergency HAZMAT teams, chemical handling, chemical warfare protection, hazardous wastes, and materials cleanups

Physical Parameters

Sizes Available	S-XL, 2X, and 3X
Weight	Average packaging weight is 4 lb
Package Size and Volume	Not specified
Power Requirements	Not applicable
Material Type	Limited-use patented fabric consisting of multiple barrier films laminated to both sides of a tough substrate material
Construction Type	Taped seam—seam produced when a sewn seam is covered with a strip of compatible material. The strip is attached by heat-sealing as with film laminated materials.
Color	Blue

Logistical Parameters

Ease of Use	Some instruction required
Consumables	Not applicable
Maintenance Requirements	Suits should be stored in a cool dry area away from direct sunlight. Level A garments should have a visual test and be pressure tested according to the ASTM F1052 Air Pressure Test Method upon arrival from manufacture, annually and/or after each use and a quick reinspection before each use.
Shelf Life	Under proper storage conditions, there is no evidence to indicate that the System CPF® film composite fabrics lose their protective characteristics or physical properties over time. This conclusion is based on the comparative testing of "aged" and new Responder® fabric. Chemical suits contain components made from various polymer or rubber materials for which there is no specific shelf life data currently available. Based on the physical condition of the suit, it is recommended that downgrading suits to "Training Use Only" be considered when they no longer pass the visual inspection and/or pressure test.
Transportability	Not applicable
Operational Limitations	There are uses and chemicals for which these garments are unsuitable. It is the responsibility of the user to review available data and verify that the garment is appropriate for the intended use and meets all specified government and industry standards.

Environmental Conditions	Protective clothing is used under a variety of conditions. Garments can be exposed to a range of ambient temperatures as well as variations in the temperatures of the challenge chemical. The temperature service range for Responder and CPF 1–4 fabrics was established by performing tests at high and low temperatures. The high temperature was established by ASTM D751, "Test Methods for Coated Fabrics," using the high temperature blocking test. In this test, the sample fabric material is subjected to the predetermined temperature for a period of time while the fabric is placed in contact with itself. The test was run at 200 °F (93 °C) and the fabrics were considered non-blocking at that temperature. The low temperature was established by ASTM D 2136, "Standard Test Method for Coated Fabrics—Low Temperature Bend Test." This test subjects the fabric material to a predetermined low temperature for a period of time while the material is flexed in a 60° bend. The sample is then examined visually for signs of cracking or other damage. The test was run at -85 °F (-65 °C) and the fabrics showed no signs of damage.
Unit Cost	Contact customer service for pricing
Maintenance Cost	Product is designed for limited use
Warranty	It is the responsibility of the user to select suits which are appropriate for each intended use and which meet all health standards. Kappler is available for consultation on any proposed use. Purchaser and all suit users shall promptly notify Kappler of any claim, whether based on contract, negligence, strict liability or otherwise. The sole and exclusive remedy of the purchaser and all users and the limit of liability of Kappler for any and all losses, injuries or damages resulting from the use of a Kappler product shall be the refund of the purchase price or the replacement or repair of product found to be defective within 90 d after the product is delivered. In no event shall Kappler be liable for any special, incidental or consequential damages, whether in contract or in tort, arising out of any warranties, representations, instructions or defects from any cause in connection with the Kappler products, or the sale thereof. The purchaser and the users are deemed to have accepted the terms of this limitation of warranty and liability, which terms may not be varied by any verbal or written agreement. Purchaser and all users are responsible for inspection and proper care of this product as described in this manual and are responsible for all loss or damage from use or handling that results from conditions beyond the control of the manufacturer.
Don/Doff Information	See instruction manual for instructions on donning and doffing
Use/Reuse	See instruction manual for suggestions on decontamination
Launderability	See instruction manual for suggestions on decontamination
Accessories	Additional accessories that may be purchased include chemtape, kooljacket, Tingley HAZMAT boots, and decon shower

Special Requirements

Training Requirements	Some instruction required
Training Available	Training video and Suit Smart CD
Manuals Available	Not applicable

Surveillance Testing Requirements	Visual inspection upon receipt from manufacturer, after each use and/or annually, and before each use
Support Equipment	Appropriate respiratory equipment
Testing Information	See permeation guides
Applicable Regulations	OSHA 1910.132 and OSHA 1910.120
Health Hazards	Not applicable
Communications Interface Capability	Not applicable
EOD Compatibility	Not applicable

General

Name ***Kappler Ensemble, EPA Level A***

ID# 145

Technology Impermeable. Aluminized fiberglass is a woven, fire resistant fiberglass fabric, laminated with an aluminized polyester film. Provides excellent protection against radiant and convective heat, if needed.

Stock Number 50660 (front entry)
50661 (rear entry)

Protection Type EPA Level A, Percutaneous

Equipment Category Certified ensemble

Availability Production began 1989

Current User(s) The first 10 National Guard RAID Teams and the USMC CBIRF, MARCORSYSCOM, POC: Adam Becker, 703–784–5898 (Tel)

Manufacturer
Kappler Safety Group
70 Grimes Drive
Guntersville, AL 35976
www.kappler.com
POC: Kendra Barclay
256–505–4000 (Tel)
256–582–1163 (Fax)
email: kbarclay@kappler.com

Manufacturer Type Domestic

Developer
Kappler Protective Apparel and Fabrics
70 Grimes Drive
Gunterville, AL 35976

Source www.kappler.com

Certification NFPA 1991, 2000 edition (to comply with NFPA 1991.00 edition, must be worn as an ensemble)

Operational Parameters

Chemical Warfare (CW) Agents Protected Against HD, GB, GD, L, and VX

Biological Warfare (BW) Agents Protected Against Not applicable

Toxic Industrial (TIMs) Protected Against	Information in Kappler Permeation Guide
Duration of Protection	6 s to 7 s at 2000 °F
Recommended Use(s)	Not specified

Physical Parameters

Sizes Available	S, M, L, XL, 2XL, and 3XL
Weight	9 lb/4.1 kg (shipping weight)
Package Size and Volume	45.9 in^3
Power Requirements	Not applicable
Material Type	Impermeable. Aluminized fiberglass is a woven, fire resistant fiberglass fabric, laminated with an aluminized polyester film. Provides excellent protection against radiant and convective heat, if needed.
Construction Type	Double sealed seams
Color	Aluminum overcover. Blue inner suit.

Logistical Parameters

Ease of Use	Overcover does not restrict mobility. Wearers can bend, twist, and turn without friction. Is sized to fit comfortably over Responder CSM totally encapsulating suits.
Consumables	Antifog may be necessary to keep the face shield from fogging
Maintenance Requirements	Not applicable
Shelf Life	Under proper storage conditions, there is no evidence to indicate that the System CPF® film composite fabrics lose their protective characteristics or physical properties over time. This conclusion is based on the comparative testing of "aged" and new Responder® fabric. Chemical suits contain components made from various polymer or rubber materials for which there is no specific shelf life data currently available. Based on the physical condition of the suit, it is recommended that downgrading suits to "training use only" be considered when they no longer pass the visual inspection and/or pressure test.
Transportability	Not applicable
Operational Limitations	Not specified
Environmental Conditions	Not applicable
Unit Cost	Contact customer service for pricing
Maintenance Cost	Product is designed for limited use
Warranty	Standard warranty is for a period of 90 d
Don/Doff Information	See instruction manual for instructions on donning and doffing

Use/Reuse	See instruction manual for instructions on donning and doffing
Launderability	Decontamination procedures should be initiated and supervised by a qualified safety professional as quickly as possible on a suit that has been exposed to toxic chemical substances. Overcovers are not designed for multiple washing and decontamination.
Accessories	None

Special Requirements

Training Requirements	4 h
Training Available	Training video and Suit Smart CD
Manuals Available	One instruction manual is included with each suit shipped
Surveillance Testing Requirements	Visual inspection and pressure test required before and after use, or as often as necessary as deemed by wearer or supervisors. Every six months when in extended storage.
Support Equipment	None
Testing Information	Material data sheet available
Applicable Regulations	None. However, each individual Government user has developed their own internal guidance regarding these issues.
Health Hazards	There is no potential health hazard associated with the possession, use, or storage of Aluminized Flash Fire Overcovers
Communications Interface Capability	Not specified
EOD Compatibility	Not specified

General

Name ***Kappler CPF 4 Coverall***

ID# 146

Technology Multi-film composite laminated to a high strength 2.3 oz polypropylene substrate

Stock Number No boots: 4T438

Protection Type Percutaneous

Equipment Category Coverall; zipper front, attached hood with elastic around face, elastic wrists, ankles, and sock boots to be worn inside regular work boots

Availability In stock

Current User(s) REC's Customers:
EPA; Department of State Consequence Management and Diplomatic Security Division; State of NY; NYC Police; City of Mobile, AL; Department of Justice Center for Domestic Preparedness; FBI; Wisconsin Office of Emergency Management; DOD; and Indiana Office of State Fire Marshall; Jefferson County, MO.

Manufacturer
Kappler Safety Group
70 Grimes Drive
Guntersville, AL 35976
www.kappler.com
POC: Kendra Barclay
256–505–4000 (Tel)
256–582–1163 (Fax)
email: kbarclay@kappler.com

Manufacturer Type Domestic

Developer
Kappler Protective Apparel and Fabrics
70 Grimes Drive
Gunterville, AL 35976

Source www.kappler.com

Certification None

Operational Parameters

Chemical Warfare (CW) Agents Protected Against None

Biological Warfare (BW) Agents Protected Against	Not applicable
Toxic Industrial (TIMs) Protected Against	Carbon disulfide, sulfuric acid, ammonia, chlorine, hydrogen chloride, and ethylene oxide
Duration of Protection	>480 min
Recommended Use(s)	Kappler recommends that CPF 4 be used in chemical applications where the risk of coming in contact with chemical is high splash

Physical Parameters

Sizes Available	S through 3XL
Weight	4T438: 17 lb
Package Size and Volume	Not specified
Power Requirements	Not applicable
Material Type	Multi-layer barrier film laminated to a 2.3 oz polypropylene substrate
Construction Type	Strapped seams
Color	Green

Logistical Parameters

Ease of Use	Some instruction required
Consumables	Not applicable
Maintenance Requirements	Suits should be stored in a cool dry area away from direct sunlight. Level A garments should have a visual test and be pressure tested according to the ASTM F1052 Air Pressure Test Method upon arrival from manufacture, annually and/or after each use and a quick re-inspection before each use.
Shelf Life	Under proper storage conditions, there is no evidence to indicate that the System CPF® film composite fabrics lose their protective characteristics or physical properties over time. This conclusion is based on the comparative testing of "aged" and new Responder® fabric. Chemical suits contain components made from various polymer or rubber materials for which there is no specific shelf life data currently available. Based on the physical condition of the suit, it is recommended that downgrading suits to "training use only" be considered when they no longer pass the visual inspection and/or pressure test.
Transportability	Not applicable
Operational Limitations	Temperature service range: -85 °F to 200 °F

Environmental Conditions

Protective clothing is used under a variety of conditions. Garments can be exposed to a range of ambient temperatures as well as variations in the temperatures of the challenge chemical. The temperature service range for Responder and CPF 1–4 fabrics was established by performing tests at high and low temperatures. The high temperature was established by ASTM D751, "Test Methods for Coated Fabrics," using the high temperature blocking test. In this test, the sample fabric material is subjected to the predetermined temperature for a period of time while the fabric is placed in contact with itself. The test was run at 200 °F (93 °C) and the fabrics were considered non-blocking at that temperature. The low temperature was established by ASTM D 2136, "Standard Test Method for Coated Fabrics—Low Temperature Bend Test." This test subjects the fabric material to a predetermined low temperature for a period of time while the material is flexed in a 60° bend. The sample is then examined visually for signs of cracking or other damage. The test was run at -85 °F (-65 °C) and the fabrics showed no signs of damage.

Unit Cost

Contact customer service for pricing

Maintenance Cost

Product is designed for limited use

Warranty

It is the responsibility of the user to select suits which are appropriate for each intended use and which meet all health standards. Kappler is available for consultation on any proposed use. Purchaser and all suit users shall promptly notify Kappler of any claim, whether based on contract, negligence, strict liability or otherwise. The sole and exclusive remedy of the purchaser and all users and the limit of liability of Kappler for any and all losses, injuries or damages resulting from use of a Kappler product shall be the refund of the purchase price or the replacement or repair of product found to be defective within 90 d after the product is delivered. In no event shall Kappler be liable for any special, incidental or consequential damages, whether in contract or in tort, arising out of any warranties, representations, instructions or defects from any cause in connection with the Kappler products, or the sale thereof. The purchaser and the users are deemed to have accepted the terms of this limitation of warranty and liability, which terms may not be varied by any verbal or written agreement. Purchaser and all users are responsible for inspection and proper care of this product as described in this manual and are responsible for all loss or damage from use or handling that results from conditions beyond the control of the manufacturer.

Don/Doff Information

See instruction manual for instructions on donning and doffing

Use/Reuse

It is completely up to the discretion of the person wearing the suit. Kappler considers CPF 4 a limited use suit, and reuse is based on both an evaluation of the physical state of the garment and also the level and type of chemical exposure.

Launderability

See instruction manual for instructions on donning and doffing

Accessories

Additional accessories that may be purchased include chemtape, kooljacket, Tingley HAZMAT boots, and decon shower

Special Requirements

Training Requirements	Some instruction required
Training Available	Training video available
Manuals Available	Instruction manual available
Surveillance Testing Requirements	Visual inspections upon receipt from manufacturer, after each use, and before the next use
Support Equipment	Appropriate respiratory equipment
Testing Information	ASTM D751 Test Battery
Applicable Regulations	OSHA 1910.132 and OSHA 1910.120
Health Hazards	Not applicable
Communications Interface Capability	Not applicable
EOD Compatibility	Not applicable

General

Name — ***Kappler CPF 3 Coverall***

ID# 147

Picture Not Available

Technology — Multi-layer barrier film laminated to a durable 2.0 oz polypropylene substrate. Provides protection in rigorous activities and where there is potential for chemical splash.

Stock Number — No elastic: 3T412
Elastic: 3T417

Protection Type — Percutaneous

Equipment Category — Coverall; zipper front and collar. No elastic/elastic wrists, and ankles.

Availability — In stock

Current User(s) — Emergency HAZMAT teams, fire departments, and law enforcement

Manufacturer — Kappler Safety Group
70 Grimes Drive
Guntersville, AL 35976
www.kappler.com
POC: Kendra Barclay
256–505–4000 (Tel)
256–582–1163 (Fax)
email: kbarclay@kappler.com

Manufacturer Type — Domestic

Developer — Kappler Protective Apparel and Fabrics
70 Grimes Drive
Gunterville, AL 35976

Source — www.kappler.com

Certification — Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against — HD, GB, GD, and VX

Biological Warfare (BW) Agents Protected Against — Not applicable

Toxic Industrial (TIMs) Protected Against — Contact Kappler for permeation guides

Duration of Protection — Contact Kappler for permeation guides

Recommended Use(s) — Emergency HAZMAT teams, chemical handling, chemical warfare protection, hazardous wastes, and materials cleanups

Physical Parameters

Sizes Available	S-XL, 2X, and 3X
Weight	Average packaging weight is 10 lb per case of six
Package Size and Volume	Not specified
Power Requirements	Not applicable
Material Type	Multi-layer barrier film laminated to a durable 2.0 oz polypropylene substrate. Greater physical strength and chemical holdout protection when compared to other film products. Provides protection in rigorous activities and where there is potential for chemical splash.
Construction Type	Taped seam—seam produced when a sewn seam is covered with a strip of compatible material. The strip is attached by heat-sealing as with film laminated materials.
Color	Tan

Logistical Parameters

Ease of Use	Some instruction required
Consumables	Not applicable
Maintenance Requirements	Suits should be stored in a cool dry area away from direct sunlight. Garments should have a visual test upon arrival from manufacture, annually and/or after each use and a quick reinspection before each use.
Shelf Life	Under proper storage conditions, there is no evidence to indicate that the System CPF® film composite fabrics lose their protective characteristics or physical properties over time. This conclusion is based on the comparative testing of "aged" and new Responder® fabric. Chemical suits contain components made from various polymer or rubber materials for which there is no specific shelf life data currently available. Based on the physical condition of the suit, it is recommended that downgrading suits to "training use only" be considered when they no longer pass the visual inspection and/or pressure test.
Transportability	Not applicable
Operational Limitations	There are uses and chemicals for which these garments are unsuitable. It is the responsibility of the user to review available data and verify that the garment is appropriate for the intended use and meets all specified government and industry standards.
Environmental Conditions	Protective clothing is used under a variety of conditions. Garments can be exposed to a range of ambient temperatures as well as variations in the temperatures of the challenge chemical. The temperature service range for Responder and CPF 1–4 fabrics was established by performing tests at high and low temperatures. The high temperature was established by ASTM D751, "Test Methods for Coated Fabrics," using the high temperature blocking test. In this test, the sample fabric material is subjected to the predetermined temperature for a period of time while the fabric is placed in contact with itself. The test was run at 200 °F (93 °C) and the fabrics were considered nonblocking at that temperature. The low temperature was established by ASTM D 2136, "Standard Test Method

for Coated Fabrics—Low Temperature Bend Test." This test subjects the fabric material to a predetermined low temperature for a period of time while the material is flexed in a 60° bend. The sample is then examined visually for signs of cracking or other damage. The test was run at -85 °F (-65 °C) and the fabrics showed no signs of damage.

Unit Cost	Contact customer service for pricing
Maintenance Cost	Product is designed for limited use
Warranty	It is the responsibility of the user to select suits which are appropriate for each intended use and which meet all health standards. Kappler is available for consultation on any proposed use. Purchaser and all suit users shall promptly notify Kappler of any claim, whether based on contract, negligence, strict liability or otherwise. The sole and exclusive remedy of the purchaser and all users and the limit of liability of Kappler for any and all losses, injuries or damages resulting from use of a Kappler product shall be the refund of the purchase price or the replacement or repair of product found to be defective within 90 d after the product is delivered. In no event shall Kappler be liable for any special, incidental or consequential damages, whether in contract or in tort, arising out of any warranties, representations, instructions or defects from any cause in connection with the Kappler products, or the sale thereof. The purchaser and the users are deemed to have accepted the terms of this limitation of warranty and liability, which terms may not be varied by any verbal or written agreement. Purchaser and all users are responsible for inspection and proper care of this product as described in this manual and are responsible for all loss or damage from use or handling that results from conditions beyond the control of the manufacturer.
Don/Doff Information	See instruction manual for donning and doffing instructions
Use/Reuse	See instruction manual for suggestions on decontamination
Launderability	See instruction manual for suggestions on decontamination
Accessories	Additional accessories that may be purchased include chemtape, kooljacket, Tingley HAZMAT boots, and decon shower

Special Requirements

Training Requirements	Some instruction required
Training Available	Training video and Suit Smart CD
Manuals Available	Not applicable
Surveillance Testing Requirements	Visual inspections upon receipt from manufacture, after each use and/or annually, before each use
Support Equipment	Appropriate respiratory equipment
Testing Information	See permeation guides
Applicable Regulations	OSHA 1910.132 and OSHA 1910.120

Health Hazards	Not applicable
Communications Interface Capability	Not applicable
EOD Compatibility	Not applicable

General

Name ***Kappler CPF 4 Coverall***

ID# 148

Picture Not Available

Technology Multi-film composite laminated to a high strength 2.3 oz polypropylene substrate

Stock Number No elastic: 4T412
Elastic: 4T417

Protection Type Percutaneous

Equipment Category Coverall; zipper front and collar. No elastic/elastic wrists, and ankles.

Availability In stock

Current User(s) REC's Customers:
EPA; Department of State Consequence Management and Diplomatic Security Division; State of NY; NYC Police; City of Mobile, AL; Department of Justice Center for Domestic Preparedness; FBI; Wisconsin Office of Emergency Management; DOD; and Indiana Office of State Fire Marshall; Jefferson County, MO.

Manufacturer Kappler Safety Group
70 Grimes Drive
Guntersville, AL 35976
www.kappler.com
POC: Kendra Barclay
256–505–4000 (Tel)
256–582–1163 (Fax)
email: kbarclay@kappler.com

Manufacturer Type Domestic

Developer Kappler Protective Apparel and Fabrics
70 Grimes Drive
Gunterville, AL 35976

Source www.kappler.com

Certification None

Operational Parameters

Chemical Warfare (CW) Agents Protected Against None

Biological Warfare (BW) Agents Protected Against Not applicable

Toxic Industrial (TIMs) Protected Against Carbon disulfide, sulfuric acid, ammonia, chlorine, hydrogen chloride, and ethylene oxide

Duration of Protection >480 min

Recommended Use(s)	Kappler recommends that CPF 4 be used in chemical applications where the risk of coming in contact with chemical is high splash

Physical Parameters

Sizes Available	S through 3XL
Weight	15 lb/10 kg, six per case
Package Size and Volume	Not specified
Power Requirements	Not applicable
Material Type	Multi-layer barrier film laminated to a 2.3 oz polypropylene substrate
Construction Type	Strapped seams
Color	Green

Logistical Parameters

Ease of Use	Some instruction required
Consumables	Not applicable
Maintenance Requirements	Suits should be stored in a cool dry area away from direct sunlight. Level A garments should have a visual test and be pressure tested according to the ASTM F1052 Air Pressure Test Method upon arrival from manufacture, annually and/or after each use and a quick reinspection before each use.
Shelf Life	Under proper storage conditions, there is no evidence to indicate that the System CPF® film composite fabrics lose their protective characteristics or physical properties over time. This conclusion is based on the comparative testing of "aged" and new Responder® fabric. Chemical suits contain components made from various polymer or rubber materials for which there is no specific shelf life data currently available. Based on the physical condition of the suit, it is recommended that downgrading suits to "training use only" be considered when they no longer pass the visual inspection and/or pressure test.
Transportability	Not applicable
Operational Limitations	Temperature service range: -85 °F to 200 °F
Environmental Conditions	Protective clothing is used under a variety of conditions. Garments can be exposed to a range of ambient temperatures as well as variations in the temperatures of the challenge chemical. The temperature service range for Responder and CPF 1–4 fabrics was established by performing tests at high and low temperatures. The high temperature was established by ASTM D751, "Test Methods for Coated Fabrics," using the high temperature blocking test. In this test, the sample fabric material is subjected to the predetermined temperature for a period of time while the fabric is placed in contact with itself. The test was run at 200 °F (93 °C) and the fabrics were considered nonblocking at that temperature. The low temperature was established by ASTM D 2136, "Standard Test Method for Coated Fabrics—Low Temperature Bend Test." This test subjects the fabric material to a predetermined low temperature for a period of time

	while the material is flexed in a 60° bend. The sample is then examined visually for signs of cracking or other damage. The test was run at -85 °F (-65 °C) and the fabrics showed no signs of damage.
Unit Cost	Contact customer service for pricing
Maintenance Cost	Product is designed for limited use
Warranty	It is the responsibility of the user to select suits which are appropriate for each intended use and which meet all health standards. Kappler is available for consultation on any proposed use. Purchaser and all suit users shall promptly notify Kappler of any claim, whether based on contract, negligence, strict liability or otherwise. The sole and exclusive remedy of the purchaser and all users and the limit of liability of Kappler for any and all losses, injuries or damages resulting from the use of a Kappler product shall be the refund of the purchase price or the replacement or repair of product found to be defective within 90 d after the product is delivered. In no event shall Kappler be liable for any special, incidental or consequential damages, whether in contract or in tort, arising out of any warranties, representations, instructions or defects from any cause in connection with the Kappler products, or the sale thereof. The purchaser and the users are deemed to have accepted the terms of this limitation of warranty and liability, which terms may not be varied by any verbal or written agreement. Purchaser and all users are responsible for inspection and proper care of this product as described in this manual and are responsible for all loss or damage from use or handling that results from conditions beyond the control of the manufacturer.
Don/Doff Information	See instruction manual for instructions on donning and doffing
Use/Reuse	It is completely up to the discretion of the person wearing the suit. Kappler considers CPF 4 a limited use suit, and reuse is based on both an evaluation of the physical state of the garment and also the level and type of chemical exposure.
Launderability	See instruction manual for instructions on donning and doffing
Accessories	Additional accessories that may be purchased include chemtape, kooljacket, Tingley HAZMAT boot, and decon shower
Special Requirements	
Training Requirements	Some instruction required
Training Available	Training video available
Manuals Available	Instruction manual available
Surveillance Testing Requirements	Visual inspections upon receipt from manufacturer, after each use, and before the next use
Support Equipment	Appropriate respiratory equipment
Testing Information	ASTM D751 Test Battery
Applicable Regulations	OSHA 1910.132 and OSHA 1910.120

Health Hazards	Not applicable
Communications Interface Capability	Not applicable
EOD Compatibility	Not applicable

General

Name — ***Kappler CPF 3 Coverall***

ID# 149

Technology — Multi-layer barrier film laminated to a durable 2.0 oz polypropylene substrate. Provides protection in rigorous activities and where there is potential for chemical splash.

Stock Number — Overboots: 3T414
Elastic ankles: 3T428

Protection Type — Percutaneous

Equipment Category — Coverall; zipper front and attached hood. Elastic around hood and wrists. Overboots/no overboots with elastic ankles.

Availability — In stock

Current User(s) — Emergency HAZMAT teams, fire departments, and law enforcement

Manufacturer — Kappler Safety Group
70 Grimes Drive
Guntersville, AL 35976
www.kappler.com
POC: Kendra Barclay
256–505–4000 (Tel)
256–582–1163 (Fax)
email: kbarclay@kappler.com

Manufacturer Type — Domestic

Developer — Kappler Protective Apparel and Fabrics
70 Grimes Drive
Gunterville, AL 35976

Source — www.kappler.com

Certification — Not applicable

Operational Parameters

Chemical Warfare (CW) Agents Protected Against — HD, GB, GD, and VX

Biological Warfare (BW) Agents Protected Against — Not applicable

Toxic Industrial (TIMs) Protected Against	Contact Kappler for permeation guides
Duration of Protection	Contact Kappler for permeation guides
Recommended Use(s)	Emergency HAZMAT teams, chemical handling, chemical warfare protection, hazardous wastes, and materials cleanups

Physical Parameters

Sizes Available	S-XL, 2X, and 3X
Weight	Average packaging weight is 10 lb per case of six
Package Size and Volume	Not specified
Power Requirements	Not applicable
Material Type	Multi-layer barrier film laminated to a durable 2.0 oz polypropylene substrate. Greater physical strength and chemical holdout protection when compared to other film products. Provides protection in rigorous activities and where there is potential for chemical splash.
Construction Type	Taped seam—seam produced when a sewn seam is covered with a strip of compatible material. The strip is attached by heat-sealing as with film laminated materials.
Color	Tan

Logistical Parameters

Ease of Use	Some instruction required
Consumables	Not applicable
Maintenance Requirements	Suits should be stored in a cool dry area away from direct sunlight. Garments should have a visual test upon arrival from manufacture, annually and/or after each use and a quick reinspection before each use.
Shelf Life	Under proper storage conditions, there is no evidence to indicate that the System CPF® film composite fabrics lose their protective characteristics or physical properties over time. This conclusion is based on the comparative testing of "aged" and new Responder® fabric. Chemical suits contain components made from various polymer or rubber materials for which there is no specific shelf life data currently available. Based on the physical condition of the suit, it is recommended that downgrading suits to "training use only" be considered when they no longer pass the visual inspection and/or pressure test.
Transportability	Not applicable
Operational Limitations	There are uses and chemicals for which these garments are unsuitable. It is the responsibility of the user to review available data and verify that the garment is appropriate for the intended use and meets all specified government and industry standards.

Environmental Conditions	Protective clothing is used under a variety of conditions. Garments can be exposed to a range of ambient temperatures as well as variations in the temperatures of the challenge chemical. The temperature service range for Responder and CPF 1–4 fabrics was established by performing tests at high and low temperatures. The high temperature was established by ASTM D751, "Test Methods for Coated Fabrics," using the high temperature blocking test. In this test, the sample fabric material is subjected to the predetermined temperature for a period of time while the fabric is placed in contact with itself. The test was run at 200 °F (93 °C) and the fabrics were considered nonblocking at that temperature. The low temperature was established by ASTM D 2136, "Standard Test Method for Coated Fabrics—Low Temperature Bend Test." This test subjects the fabric material to a predetermined low temperature for a period of time while the material is flexed in a 60° bend. The sample is then examined visually for signs of cracking or other damage. The test was run at -85 °F (-65 °C) and the fabrics showed no signs of damage.
Unit Cost	Contact customer service for pricing
Maintenance Cost	Product is designed for limited use
Warranty	It is the responsibility of the user to select suits which are appropriate for each intended use and which meet all health standards. Kappler is available for consultation on any proposed use. Purchaser and all suit users shall promptly notify Kappler of any claim, whether based on contract, negligence, strict liability or otherwise. The sole and exclusive remedy of the purchaser and all users and the limit of liability of Kappler for any and all losses, injuries or damages resulting from the use of a Kappler product shall be the refund of the purchase price or the replacement or repair of product found to be defective within 90 d after the product is delivered. In no event shall Kappler be liable for any special, incidental or consequential damages, whether in contract or in tort, arising out of any warranties, representations, instructions or defects from any cause in connection with the Kappler products, or the sale thereof. The purchaser and the users are deemed to have accepted the terms of this limitation of warranty and liability, which terms may not be varied by any verbal or written agreement. Purchaser and all users are responsible for inspection and proper care of this product as described in this manual and are responsible for all loss or damage from use or handling that results from conditions beyond the control of the manufacturer.
Don/Doff Information	See instruction manual for donning and doffing instructions
Use/Reuse	See instruction manual for suggestions on decontamination
Launderability	See instruction manual for suggestions on decontamination
Accessories	Additional accessories that may be purchased include chemtape, kooljacket, Tingley HAZMAT boots, and decon shower

Special Requirements

Training Requirements	Some instruction required
Training Available	Training video and Suit Smart CD

Manuals Available	Not applicable
Surveillance Testing Requirements	Visual inspections upon receipt from manufacture, after each use and/or annually, before each use
Support Equipment	Appropriate respiratory equipment
Testing Information	See permeation guides
Applicable Regulations	OSHA 1910.132 and OSHA 1910.120
Health Hazards	Not applicable
Communications Interface Capability	Not applicable
EOD Compatibility	Not applicable